ELSEVIER

Powder Technology 88 (1996) 349

POWDER TECHNOLOGY

Author Index of Volume 88

Abdel-Monem, H., 101
Adams, M.J., 155
Ahmed, N., 33
Amal, R., 27, 51
Amos, G., 107
Arnold, P.C., 81

Benkreira, H., 107
Berruti, F., 123
Birch, D., 33
Briscoe, B.J., 255

Chhabra, R.P., 39
Clark, N.N., 179
Clift, R., 335

Davies, C.E., 89
Davies, R., 191

El-Gibaly, I., 101
El-Haras, S., 101
Ennis, B.J., 15, 203
Evans, G.M., 21

Fan, L.-S., 245
Fenton, K., 89

Galvin, K.P., 45

Hafez, E., 101
Harano, A., 261
Hartholt, G.P., 341
Hoffmann, A.C., 341

Iveson, S.M., 15

Jameson, G.J., 21
Janssen, L.P.B.M., 341
Jung, S.J., 51

Klinzing, G.E., 143
Kondo, T., 101
Kristensen, H.G., 197

Langberg, D.E., 95
Litster, J.D., 15, 65, 165
Liu, L.X., 65
Liu, W., 179
Logos, C., 55
Luketina, D., 27

Matsen, J.M., 237
Matthews, H.B., 227
McKeown, R., 155

Menezes, F.M., 27
Miller, S.M., 227
Milne, B.J., 123
Molerus, O., 309
Mouchacca, A.N., 95
Muramatsu, N., 101

Nguyen, Q.D., 55
Nikolov, A.D., 299
Nilmani, M., 95

Pal, U.B., 173
Pfeffer, R., 323
Pratsinis, S.E., 267
Proscia, W.M., 143
Pugsley, T.S., 123

Raper, J.A., 51
Rastogi, S., 143
Raven, J., 45
Rawlings, J.B., 227
Rhodes, M., 3
Rhodes, M.J., 107
Rigby, G.D., 21
Roco, M.C., 275
Rudolph, V., 65

Sadakata, M., 261
Sarwono, R., 165
Savage, S.B., 323
Scarboro, M.J., 45
Schwedes, J., 133, 285
Somasundaran, P., 305
Spannenberg, A.B., 45
Sridhar, S., 173

Turton, R., 179

Uematsu, K., 291

Vemury, S., 267

Wasan, D.T., 299
Whiten, W.J., 59

Xu, Y.B., 261

Yu, A.B., 71
Yu, X., 305
Yu, Y., 81

Zhang, D., 59
Zhao, Z.M., 323
Zou, R.P., 71

Elsevier Science S.A.

ELSEVIER

Powder Technology 88 (1996) 351–354

POWDER TECHNOLOGY

Subject Index of Volume 88

Aerated power consumption
gas sparging in vessels agitated by mixed flow impellers, 33
Aerosol reactor
a systematic approach for the design of aerosol reactors, 261
Aerosols
particle formation in gases: a review, 267
Agglomerate formation
fluidized drum granulation: studies of agglomerate formation, 165
Agglomeration
particle agglomeration in high shear mixers, 197
agglomeration and size enlargement. Session summary paper, 203
particle formation in gases: a review, 267
Anion exchange
preparation and evaluation of microencapsulated sulfadiazine resin complex, 101

Batch sedimentation
particle–particle interactions in concentrated dispersions as probed by the capillary force balance with application to batch sedimentation, 299
Bidispersed particle system
particle–particle interactions in concentrated dispersions as probed by the capillary force balance with application to batch sedimentation, 299
Bimodal slurry
effect of particle size on the flow properties of a South Australian coal–water slurry, 55
Binary mixtures
visual observations of individual particle behaviour in gas and liquid fluidized beds, 341
Binary suspension
continuous differential sedimentation of a binary suspension, 45
Binder parameters
fundamental studies of granule consolidation. Part 1: Effects of binder content and binder viscosity, 15
Bin flow patterns
the influence of screw feeders on bin flow patterns, 81
Bubble
data interpretation techniques for inferring bubble size distribution from probe signals in fluidized systems, 179
Bubble coalescence mechanisms
summary paper on fluidization and transport phenomena, 245
Bubbling
the effect of liquid cross-flow on the modelling of gas flow from an orifice located in the wake of a bluff body, 21

Calibration curve
calculation of optic fibres calibration curves for the measurement of solids volume fractions in multiphase flows, 107
Capillary pressure
particle–particle interactions in concentrated dispersions as probed by the capillary force balance with application to batch sedimentation, 299

Ceramics
particle formation in gases: a review, 267
immersion microscopy for detailed characterization of defects in ceramic powders and green bodies, 291
Cermet
effect of slurry properties on anode cermets for solid oxide fuel cells, 173
Characterization
immersion microscopy for detailed characterization of defects in ceramic powders and green bodies, 291
Circulating beds
an innovative non-mechanical solids feeder for high solids mass fluxes in circulating fluidized bed risers, 123
Circulating fluidized beds
a theoretical model for gas–particle contact efficiency in circulating fluid bed risers, 133
Cluster structures
summary paper on fluidization and transport phenomena, 245
Coagulation
removal of particles using coagulation and flocculation in a dynamic separator, 27
Coal particle temperature
morphological characterization of coal under rapid heating devolatilization, 143
Colloidal particles
removal of particles using coagulation and flocculation in a dynamic separator, 27
Combustion
morphological characterization of coal under rapid heating devolatilization, 143
Compaction
micromechanical analyses of the pressure–volume relationships for powders under confined uniaxial compression, 155
agglomeration and size enlargement. Session summary paper, 203
Concentration
summary of the particle characterization session, 191
Contact mechanics
micromechanical analyses of the pressure–volume relationships for powders under confined uniaxial compression, 155
Contact point
the calculation of contact forces between particles using spring and damping models, 59
Continuous sedimentation
continuous differential sedimentation of a binary suspension, 45
Continuum mechanics
powder technology and particle science, 335
Crystallization
model identification for crystallization: theory and experimental verification, 227

Dashpot component
the calculation of contact forces between particles using spring and damping models, 59

Elsevier Science S.A.

Defects
immersion microscopy for detailed characterization of defects in ceramic powders and green bodies, 291
Density measurement
model identification for crystallization: theory and experimental verification, 227
Devolatilization
morphological characterization of coal under rapid heating devolatilization, 143
Diamond deposition
a direct current, plasma fluidized bed reactor: its characteristics and application in diamond synthesis, 65
Differential sedimentation
continuous differential sedimentation of a binary suspension, 45
Dilute transport
what is turbulent fluidization?, 3
Discrete element simulations
the calculation of contact forces between particles using spring and damping models, 59
Dispersion
dispersions: Progresses and prospects, 305
Dispersion stability
particle–particle interactions in concentrated dispersions as probed by the capillary force balance with application to batch sedimentation, 299
Drum speed
fluidized drum granulation: studies of agglomerate formation, 165
Drying
solids transport, separation and classification, 323
Dynamic separator
removal of particles using coagulation and flocculation in a dynamic separator, 27

Electrode
effect of slurry properties on anode cermets for solid oxide fuel cells, 173
Electrostatic precipitators
solids transport, separation and classification, 323
Entrainment
summary paper on fluidization and transport phenomena, 245
Experiments
multiphase flow: summary paper, 275

Filters
solids transport, separation and classification, 323
Flocculation
removal of particles using coagulation and flocculation in a dynamic separator, 27
Floc structure
monitoring effects of shearing on floc structure using small-angle light scattering, 51
Flow function
measurement of flow properties of bulk solids, 285
Flow properties
effect of particle size on the flow properties of a South Australian coal–water slurry, 55
Fluidization
data interpretation techniques for inferring bubble size distribution from probe signals in fluidized systems, 179
Fluidized beds
a direct current, plasma fluidized bed reactor: its characteristics and application in diamond synthesis, 65
continuous estimation of particle size using a fluidized bed with a vertical slot, 89
scale-up of fluidized bed processes: principle and practice, 237
summary paper on fluidization and transport phenomena, 245
Fluidized drum granulation
fluidized drum granulation: studies of agglomerate formation, 165
Fluid-particle systems
summary paper on fluidization and transport phenomena, 245
Fractal characteristics
summary paper on fluidization and transport phenomena, 245
Fractal dimensions
monitoring effects of shearing on floc structure using small-angle light scattering, 51
Fractals
particle formation in gases: a review, 267
Friction
micromechanical analyses of the pressure–volume relationships for powders under confined uniaxial compression, 155

Gas dispersion
the effect of liquid cross-flow on the modelling of gas flow from an orifice located in the wake of a bluff body, 21
gas sparging in vessels agitated by mixed flow impellers, 33
Gas induction
the effect of liquid cross-flow on the modelling of gas flow from an orifice located in the wake of a bluff body, 21
Gas–liquid reactors
gas sparging in vessels agitated by mixed flow impellers, 33
Glycerol solutions
characterization of phenomena associated with impacting of spheres into glycerol solutions, 95
Granular flow
solids transport, separation and classification, 323
Granulation
particle agglomeration in high shear mixers, 197
agglomeration and size enlargement. Session summary paper, 203
Granulation regime
fluidized drum granulation: studies of agglomerate formation, 165
Granule behaviour
fundamental studies of granule consolidation. Part 1: Effects of binder content and binder viscosity, 15
Granule deformation
fundamental studies of granule consolidation. Part 1: Effects of binder content and binder viscosity, 15
Green body
immersion microscopy for detailed characterization of defects in ceramic powders and green bodies, 291
Group B powders
visual observations of individual particle behaviour in gas and liquid fluidized beds, 341

High solids fluxes
an innovative non-mechanical solids feeder for high solids mass fluxes in circulating fluidized bed risers, 123
Hydrocyclones
solids transport, separation and classification, 323
Hydrolysation
monitoring effects of shearing on floc structure using small-angle light scattering, 51

Impacting particles
characterization of phenomena associated with impacting of spheres into glycerol solutions, 95
Instrumentation
dispersions: Progresses and prospects, 305
Interparticle cohesion
visual observations of individual particle behaviour in gas and liquid fluidized beds, 341
Interparticle friction
fundamental studies of granule consolidation. Part 1: Effects of binder content and binder viscosity, 15

Interparticle interaction
interaction laws and the rheology of assemblies, 255
particle–particle interactions in concentrated dispersions as probed by the capillary force balance with application to batch sedimentation, 299
Iron hydroxide flocs
monitoring effects of shearing on floc structure using small-angle light scattering, 51

Jetting
the effect of liquid cross-flow on the modelling of gas flow from an orifice located in the wake of a bluff body, 21

Liquid spray rate
fluidized drum granulation: studies of agglomerate formation, 165

Mass transfer
a theoretical model for gas–particle contact efficiency in circulating fluid bed risers, 133
Mathematical model
a theoretical model for gas–particle contact efficiency in circulating fluid bed risers, 133
Mathematical modeling
model identification for crystallization: theory and experimental verification, 227
Microencapsulation
preparation and evaluation of microencapsulated sulfadiazine resin complex, 101
Microscope
immersion microscopy for detailed characterization of defects in ceramic powders and green bodies, 291
Microstructure
multiphase flow: summary paper, 275
Mixing
solids transport, separation and classification, 323
Modeling
scale-up of fluidized bed processes: principle and practice, 237
multiphase flow: summary paper, 275
Morphological parameters
morphological characterization of coal under rapid heating devolatilization, 143
Morphology
summary of the particle characterization session, 191
Multiple reflection
calculation of optic fibres calibration curves for the measurement of solids volume fractions in multiphase flows, 107

Non-mechanical valve
an innovative non-mechanical solids feeder for high solids mass fluxes in circulating fluidized bed risers, 123
Non-spherical particles
wall effects on terminal velocity of non-spherical particles in non-Newtonian polymer solutions, 39
evaluation of the packing characteristics of mono-sized non-spherical particles, 71

Opening dimension
continuous estimation of particle size using a fluidized bed with a vertical slot, 89
Optical probes
calculation of optic fibres calibration curves for the measurement of solids volume fractions in multiphase flows, 107

Packing
evaluation of the packing characteristics of mono-sized non-spherical particles, 71
Packing size
evaluation of the packing characteristics of mono-sized non-spherical particles, 71
Particle assemblies
interaction laws and the rheology of assemblies, 255
Particle behaviour
powder technology and particle science, 335
visual observations of individual particle behaviour in gas and liquid fluidized beds, 341
Particle characterization
summary of the particle characterization session, 191
Particle classification
solids transport, separation and classification, 323
Particle mobility
visual observations of individual particle behaviour in gas and liquid fluidized beds, 341
Particle science
powder technology and particle science, 335
Particle size
effect of particle size on the flow properties of a South Australian coal–water slurry, 55
Particle size distribution
effect of particle size on the flow properties of a South Australian coal–water slurry, 55
Particle size estimation
continuous estimation of particle size using a fluidized bed with a vertical slot, 89
Particle synthesis
a systematic approach for the design of aerosol reactors, 261
Parzen window
data interpretation techniques for inferring bubble size distribution from probe signals in fluidized systems, 179
Pitch characteristics
the influence of screw feeders on bin flow patterns, 81
Plug flow
overview: Pneumatic transport of solids, 309
Pneumatic conveyance
overview: Pneumatic transport of solids, 309
Pneumatic conveying
solids transport, separation and classification, 323
Porosity
evaluation of the packing characteristics of mono-sized non-spherical particles, 71
Powder
immersion microscopy for detailed characterization of defects in ceramic powders and green bodies, 291
Power law
wall effects on terminal velocity of non-spherical particles in non-Newtonian polymer solutions, 39
Pressure drop
overview: Pneumatic transport of solids, 309
Pressure loop
an innovative non-mechanical solids feeder for high solids mass fluxes in circulating fluidized bed risers, 123
Probe
data interpretation techniques for inferring bubble size distribution from probe signals in fluidized systems, 179
Probe signal
data interpretation techniques for inferring bubble size distribution from probe signals in fluidized systems, 179
Process development
dispersions: Progresses and prospects, 305
Processing
immersion microscopy for detailed characterization of defects in ceramic powders and green bodies, 291
Process measurement
summary of the particle characterization session, 191

Pseudoplastic
effect of slurry properties on anode cermets for solid oxide fuel cells, 173

Rheology
dispersions: Progresses and prospects, 305

Scale-up
scale-up of fluidized bed processes: principle and practice, 237
Screw feeders
the influence of screw feeders on bin flow patterns, 81
Separation processes
solids transport, separation and classification, 323
Settling
effect of slurry properties on anode cermets for solid oxide fuel cells, 173
Shearing effects
monitoring effects of shearing on floc structure using small-angle light scattering, 51
Shearthinning fluids
wall effects on terminal velocity of non-spherical particles in non-Newtonian polymer solutions, 39
Single-element modelling
powder technology and particle science, 335
Sintering
particle formation in gases: a review, 267
Size distribution
model identification for crystallization: theory and experimental verification, 227
particle formation in gases: a review, 267
Size enlargement
agglomeration and size enlargement. Session summary paper, 203
Slurry
effect of slurry properties on anode cermets for solid oxide fuel cells, 173
Solid oxide fuel cell
effect of slurry properties on anode cermets for solid oxide fuel cells, 173
Solids concentration
effect of particle size on the flow properties of a South Australian coal–water slurry, 55
Solids penetration
characterization of phenomena associated with impacting of spheres into glycerol solutions, 95
Solids transport
solids transport, separation and classification, 323
Solids volume fraction
calculation of optic fibres calibration curves for the measurement of solids volume fractions in multiphase flows, 107
Sparger design
gas sparging in vessels agitated by mixed flow impellers, 33
Spectral characteristics
summary paper on fluidization and transport phenomena, 245
Sphericity
evaluation of the packing characteristics of mono-sized non-spherical particles, 71
Sprays
particle formation in gases: a review, 267
Spray zone
fluidized drum granulation: studies of agglomerate formation, 165
Spring component
the calculation of contact forces between particles using spring and damping models, 59
State of flow
overview: Pneumatic transport of solids, 309
Steady state flow
measurement of flow properties of bulk solids, 285
Stirred vessels
gas sparging in vessels agitated by mixed flow impellers, 33
Strength
micromechanical analyses of the pressure–volume relationships for powders under confined uniaxial compression, 155
Sulfadiazine–resin
preparation and evaluation of microencapsulated sulfadiazine resin complex, 101
Systematic reactor design
a systematic approach for the design of aerosol reactors, 261

Temperature profiles
a direct current, plasma fluidized bed reactor: its characteristics and application in diamond synthesis, 65
Terminal velocity
wall effects on terminal velocity of non-spherical particles in non-Newtonian polymer solutions, 39
Transition regime
what is turbulent fluidization?, 3
Turbulence
particle formation in gases: a review, 267
Turbulent fluidization
what is turbulent fluidization?, 3
Turbulent theory
a systematic approach for the design of aerosol reactors, 261
Two-phase flow
data interpretation techniques for inferring bubble size distribution from probe signals in fluidized systems, 179
multiphase flow: summary paper, 275

Ultrafine particles
a systematic approach for the design of aerosol reactors, 261

Vibration segregation
solids transport, separation and classification, 323
Viscous dissipation
fundamental studies of granule consolidation. Part 1: Effects of binder content and binder viscosity, 15

Wall effects
wall effects on terminal velocity of non-spherical particles in non-Newtonian polymer solutions, 39
Wave phenomena
summary paper on fluidization and transport phenomena, 245

Yield strength
measurement of flow properties of bulk solids, 285